

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14562

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K39/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE, WPI Data, PAJ, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/17551 A (SMITHKLINE BEECHAM BIOLOG ;WETTENDORFF MARTINE ANNE CECIL (BE)) 15 March 2001 (2001-03-15)	1-21
Y	abstract page 8, paragraph 7 page 9, paragraphs 4,5 example 1 ----- -/--	1-21

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*&\* document member of the same patent family

Date of the actual completion of the International search

3 May 2004

Date of mailing of the International search report

02/06/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Lechner, O

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14562

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BALSLEY JF ET AL: "Progress in the development of human papillomavirus vaccines for HPV-11 and HPV-16/18 and mapping of a critical neutralizing epitope." 18TH INTERNATIONAL PAPILLOMAVIRUS CONFERENCE 2000, 'Online! 2000, XP002278802 Retrieved from the Internet: <URL:http://www.hpv2000.com/1dabstract.asp?id=366> 'retrieved on 2004-05-03!	1-7, 11-16, 19-21
Y	the whole document	1-21
X	HPV Clinical Workshop & 20th International Papillomavirus Conference 2002, October 4-9, Paris, Institut Pasteur. Villa-L et al., A dose-ranging safety and immunogenicity study of a quadrivalent HPV (type 6/11/16/18) L1 VLP vaccine in women. XP002281268	1-7, 11-16, 19-21
Y	abstract	1-21
Y	BASS E: "Progress in the Search of a vaccine against human papilloma virus" IAVI REPORT OCTOBER/NOVEMBER 2002, 'Online! 10 October 2002 (2002-10-10), XP002281262 Retrieved from the Internet: <URL:www.aegis.com/pubs/iavi/2002/IAVI2002-1003.html> 'retrieved on 2004-04-21!	1-21
X	Brown-DR et al., A dose-ranging study of the safety and immunogenicity profiles of a quadrivalent HPV (types 6, 11, 16, and 18) L1 VLP candidate vaccine in young healthy women. ABstr 0-51 19th International Papillomavirus Conference, Sept-2001, Florianopolis, Brazil XP002278803	1-7, 11-16, 19-21
Y	abstract	1-21
X	WO 01/97840 A (MEDIMMUNE INC) 27 December 2001 (2001-12-27) page 12, paragraph 3 page 13, last paragraph -page 14, paragraph 2 page 15, paragraph 4 claims 1,2	1-7, 10-16

-/--

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14562

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 251 678 B1 (MACH HENRYK ET AL) 26 June 2001 (2001-06-26)  abstract claims 1-14	1-7, 11-16, 19-21
Y	DE 43 32 596 A (SAPP MARTIN JOSEF DR ;STREECK ROLF E DR (DE)) 30 March 1995 (1995-03-30) abstract table 1 claims 1-9	1-21
Y	COMBITA ALBA-LUCIA ET AL: "Identification of two cross-neutralizing linear epitopes within the L1 major capsid protein of human papillomaviruses." JOURNAL OF VIROLOGY. UNITED STATES JUL 2002, vol. 76, no. 13, July 2002 (2002-07), pages 6480-6486, XP002278799 ISSN: 0022-538X abstract page 6485, left-hand column, paragraphs 2,3 page 6484, right-hand column, paragraph 4	1-21
Y	SCHILLER J T ET AL: "PAPILLOMAVIRUS-LIKE PARTICLE BASED VACCINES: CERVICAL CANCER AND BEYOND" EXPERT OPINION ON BIOLOGICAL THERAPY, ASHLEY, LONDON, GB, vol. 1, no. 4, July 2001 (2001-07), pages 571-581, XP008028179 ISSN: 1471-2598 abstract paragraphs '02.2!-'02.3!	1-21
A	STELLER MICHAEL A: "Cervical cancer vaccines: progress and prospects." JOURNAL OF THE SOCIETY FOR GYNECOLOGIC INVESTIGATION. UNITED STATES 2002 SEP-OCT, vol. 9, no. 5, September 2002 (2002-09), pages 254-264, XP002278800 ISSN: 1071-5576 the whole document	1-21

-/--

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14562

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>BACHTIARY BARBARA ET AL: "Impact of multiple HPV infection on response to treatment and survival in patients receiving radical radiotherapy for cervical cancer."</p> <p>INTERNATIONAL JOURNAL OF CANCER. JOURNAL INTERNATIONAL DU CANCER. UNITED STATES 20 NOV 2002, vol. 102, no. 3, 20 November 2002 (2002-11-20), pages 237-243, XP002278801 ISSN: 0020-7136 abstract page 237, left-hand column, paragraphs 1,3 -right-hand column, paragraph 1 page 242, left-hand column, paragraph 2</p>	1-21

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 03/14562

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 11-19 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/14562

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0117551	A	15-03-2001	AU 766494 B2	16-10-2003
			AU 7775100 A	10-04-2001
			BR 0014171 A	21-05-2002
			CA 2384064 A1	15-03-2001
			CA 2443214 A1	15-03-2001
			CN 1387443 T	25-12-2002
			CZ 20020843 A3	14-08-2002
			WO 0117551 A2	15-03-2001
			EP 1210113 A2	05-06-2002
			EP 1410805 A1	21-04-2004
			HU 0202804 A2	28-12-2002
			JP 2003508495 T	04-03-2003
			JP 2004067696 A	04-03-2004
			NO 20021116 A	30-04-2002
			NO 20033715 A	30-04-2002
			NZ 517621 A	26-09-2003
			PL 354039 A1	15-12-2003
			TR 200200607 T2	21-06-2002
WO 0197840	A	27-12-2001	AU 7545801 A	02-01-2002
			CA 2411945 A1	27-12-2001
			EP 1292328 A1	19-03-2003
			WO 0197840 A1	27-12-2001
US 6251678	B1	26-06-2001	AU 764138 B2	14-08-2003
			AU 2749200 A	25-08-2000
			CA 2361837 A1	10-08-2000
			EP 1150712 A2	07-11-2001
			JP 2002536340 T	29-10-2002
			WO 0045841 A2	10-08-2000
DE 4332596	A	30-03-1995	DE 4332596 A1	30-03-1995